STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





The President and Trustees of Colby College Kennebec County Waterville, Maine A-107-71-W-R/M (SM) Departmental
Findings of Fact and Order
Air Emission License
Renewal and Minor Revision

FINDINGS OF FACT

After review of the air emission license renewal and amendment applications, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

The President and Trustees of Colby College (Colby) has applied to renew their Air Emission License permitting the operation of emission sources associated with their educational institution.

Colby has requested a minor revision to their license in order to change the designation of SICE #1 from *non-emergency* to *emergency*.

The equipment addressed in this license is located on the Colby College Campus at 4996 Mayflower Hill Drive, Waterville, Maine.

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B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Eval Town	D. A. C.N.	G. 7.11
Equipment	(141141Dta/III)		Fuel Type	Date of Manuf.	Stack #
Boiler 10A	37.1	36,373 scf/hr	Natural Gas		
	37.1	405.46 gal/hr	LPG*		
Boiler 10B	37.1	36,373 scf/hr	Natural Gas	1000	
Boner Tob	37.1	405.46 gal/hr	LPG*	1992	9
Boiler 10C	19.0	18,628 scf/hr	Natural Gas		
Boner roc	17.0	207.65 gal/hr	LPG*		
BIO1	20.0	4,342 lb/hr	Biomass/wood,	2011	4.0
BIO2	20.0	4,342 lb/hr	45% moisture	2011	10

^{*}LPG = liquefied petroleum gas

Generators

	Maximum	Energy				
Equipment	Capacity (MMBtu/hr)	Output kW/BHP*	Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Date of Install.
SICE #1	2.5	205/306	15.4 gal/hr	Distillate Fuel, 0.0015%	1996	1998
SICE #2	4.9	500/695	35.8 gal/hr	Distillate Fuel, 0.0015%	1998	1999
SICE #3	0.56	50/70	4.1 gal/hr	Distillate Fuel, 0.0015%	2000	2000
SICE #4	0.75	60/84	8.0 gal/hr	LPG, negl.	2005	2005
SICE #5	0.70	50/70	7.3 gal/hr	LPG, negl.	2004	2005
SICE #6	1.46	105/195	16.2 gal/hr**	LPG, negl.	2012	2014
SICE #7	0.62	64/86	4.5 gal/hr	Distillate Fuel, 0.0015%	2012	2012

^{*}BHP = brake horsepower

Miscellaneous Equipment

Equipment	Size	Pollution Control Equipment
Gasoline Storage Tank	3,000 gallon	-
Parts Washer	15 gallon	-

^{**}Calculated from 582 scf/hr * 0.0278 gal/scf

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C. <u>Definitions</u>

Biomass, for the purpose of this license and in accordance with 40 CFR Part 63, Subpart JJJJJJ, means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); and vegetative agricultural and silvicultural materials, such as logging residues (slash).

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<u>Distillate Fuel</u> means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, diesel fuel oil numbers 1 or 2, as defined in ASTM D975, kerosene, as defined in ASTM D3699, biodiesel as defined in ASTM D6751, or biodiesel blends as defined in ASTM D7467.

<u>Wood</u>, for the purpose of this license and in accordance with 40 CFR Part 60, Subpart Dc, means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

D. Application Classification

The application for Colby does not include the licensing of increased emissions or the installation of new or modified equipment but does include the re-designation of SICE #1 from non-emergency to emergency. Therefore, the license is considered to be a renewal of currently licensed emission units with a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). With the annual fuel limit on Boilers 10A, 10B, and 10C combined and the operating hour restrictions on SICE #1-7, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the annual fuel limit on Boilers 10A, 10B, and 10C combined and the operating hour restrictions on SICE #1-7, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment.

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BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

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- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boilers 10A, 10B, and 10C

Colby operates Boilers 10A, 10B, and 10C for steam and heat. All three boilers are Babcock and Wilcox package watertube Model FM9-57 boilers. Boilers 10A and 10B are both rated at 37.1 MMBtu/hr and Boiler 10C is rated at 19.0 MMBtu/hr. All three boilers fire natural gas with the ability to fire LPG as a back-up fuel. Boilers 10A, 10B, and 10C are all located at Colby's central heating plant and are restricted to a combined heat input of 246,840 MMBtu/yr. All three boilers were installed in 1992 and exhaust through a common stack, Stack 9.

1. BPT Findings

The BPT emission limits for Boilers 10A, 10B, and 10C when firing natural gas or LPG were based on the following:

PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT

SO₂ – 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98.

NO_x – 0.1 lb/MMBtu, manufacturer's guarantee

CO – 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98

VOC – 0.02 lb/MMBtu, manufacturer's guarantee

Opacity - 06-096 CMR 101(2)(B)(1)(c)

The BPT emission limits for Boilers 10A, 10B, and 10C are the following:

<u>Unit</u>	<u>Pollutant</u>	lb/MMBtu	Origin and Authority
Boilers 10A, 10B, and 10C [each]	PM	0.05	06-096 CMR 115, BPT

<u>Unit</u>	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boilers 10A and 10B [each] Natural gas/LPG	1.86	1.86	0.02	3.71	3.06	0.74
Boiler 10C Natural gas/LPG	0.95	0.95	0.01	1.90	1.56	0.38

Visible emissions from the combined stack for Boilers 10A, 10B, and 10C, Stack 9, shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

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2. Periodic Monitoring

Periodic monitoring for Boilers 10A, 10B, and 10C shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. Documentation shall include the type and quantity of fuel used. Fuel use shall be converted to heat input on a monthly and 12-month rolling total basis using heating values of 0.00102 MMBtu/scf for natural gas and 0.0915 MMBtu/gal for LPG.

3. NSPS 40 CFR Part 60, Subpart Dc

Due to the size and year of manufacture of these boilers they are subject to the New Source Performance Standards (NSPS) 40 Code of Federal Regulations (CFR) Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

Colby shall comply with all requirements of 40 CFR Part 60, Subpart Dc applicable to Boilers 10A, 10B, and 10C including, but not limited to, the following:

- a. Colby shall maintain records of the amount of each fuel combusted in Boilers 10A, 10B, and 10C during each calendar month. [40 CFR Part 60, §60.48c (g)(2)]
- b. Each record shall be maintained by Colby for a period of two years following the date of such record. [40 CFR Part 60, §60.48c (i)]

4. NESHAP 40 CFR Part 63, Subpart JJJJJJ

Boilers 10A, 10B, and 10C are not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63, Subpart JJJJJJ). The units are considered gas-fired boilers rated more than 10 MMBtu/hr.

Gas-fired boilers are exempt from 40 CFR Part 63, Subpart JJJJJJ; however, boilers which fire fuel oil are not. A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 CFR Part 63.11237]

Any boiler designed to burn fuels besides gaseous fuels prior to June 4, 2010 will be considered an existing boiler under this rule. A boiler which currently fires gaseous fuels, but converts back to firing another fuel (such as distillate fuel) in the future would become subject as an existing boiler at the time it is converted back to oil.

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C. Boilers BIO1 and BIO2

Colby operates Boilers BIO1 and BIO2 for steam and heat. BIO1 and BIO2 are both biomass/wood-fueled gasifier/boiler systems rated at 20 MMBtu/hr with a firing rate of 4,342 lb/hr of biomass/wood with an average moisture content of 45% and an average heating value of 4606 Btu/lb. BIO1 and BIO2 were both installed in 2011 and exhaust through a common stack, Stack 10.

Particulate matter (PM) emissions from BIO1 and BIO2 shall be controlled through the use of a multi-clone at the outlet of each boiler, combined with an Electrostatic Precipitator (ESP) controlling PM in the flue gas of the combined stack.

1. BPT Findings

The BPT emission limits for Boilers BIO1 and BIO2 were based on the following:

PM/PM_{10}	 0.03 lb/MMBtu based on A-107-71-Q-R/A dated 11/5/10, BACT
SO_2	 0.025 lb/MMBtu based on A-107-71-Q-R/A dated 11/5/10, BACT
NO_x	 0.31 lb/MMBtu based on A-107-71-S-M dated 10/25/13, BACT
CO	 0.15 lb/MMBtu based on A-107-71-Q-R/A dated 11/5/10, BACT
VOC	0.017 lb/MMBtu based on A-107-71-Q-R/A dated 11/5/10, BACT
Opacity	A-107-71-Q-R/A dated 11/5/10, BACT

The BPT emission limits for Boilers BIO1 and BIO2 are the following:

<u>Unit</u>	Pollutant	lb/MMBtu	Origin and Authority
BIO1 and	PM	0.03	A-107-71-Q-R/A dated
BIO2 [each]	PM	0.03	11/5/2010, BACT

<u>Unit</u>	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
BIO1 and BIO2 [each] Biomass (45% moisture)	0.60	0.60	0.50	6.25	3.00	0.34

Visible emissions from the combined stack serving Boilers BIO1 and BIO2, Stack 10, shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

There is no license restriction of annual operating hours for either Boiler BIO1 or BIO2.

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2. Periodic Monitoring

Periodic monitoring for Boilers BIO1 and BIO2 shall include recordkeeping to document fuel use on a monthly and 12-month rolling total basis per 40 CFR Part 60, Subpart Dc. Documentation shall include the type and mass of fuel combusted in each boiler during each calendar month.

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3. NSPS 40 CFR Part 60, Subpart Dc

Due to their size and year of manufacture Boilers BIO1 and BIO2 are subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

Colby shall comply with all requirements of 40 CFR Part 60, Subpart Dc applicable to Boilers BIO1 and BIO2 including, but not limited to, the following:

- a. Colby shall maintain records of the amount of each fuel combusted in each boiler during each calendar month. [40 CFR Part 60, §60.48c (g)(2)]
- b. Each record shall be maintained by Colby for a period of two years following the date of such record. [40 CFR Part 60, §60.48c (i)]

4. NESHAP 40 CFR Part 63, Subpart JJJJJJ

Boilers BIO1 and BIO2 are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63, Subpart JJJJJ). The units are considered new biomass boilers rated greater than 10 MMBtu/hr. Units are considered new if they commenced construction after June 4, 2010. Commenced means that the owner or operator of an affected source has undertaken a continuous program of construction or that they have entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction. The contract for the manufacture and installation of BIO1 and BIO2 was signed after June 4, 2010, therefore the units are considered new and not existing.

A summary of the currently applicable federal 40 CFR Part 63 Subpart JJJJJJ requirements is listed below. At this time, the Department has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA, however Colby is still subject to the requirements. Notification forms and additional rule information can be found on the following website: http://www.epa.gov/ttn/atw/boiler/boilerpg.html.

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- a. Emission Limits and Work Practice Requirements
 - (1) BIO1 and BIO2 are subject to the following requirements:

	Operating Limitations
New biomass-fired	- Limit emissions of PM (filterable) to less than or equal to
boilers with heat input	0.070 lb/MMBtu except for periods of startup and
capacity between 10	shutdown (40 CFR Part 63, Subpart JJJJJJ, Table 1);
and 30 MMBtu/hr	- Minimize the boilers' startup and shutdown periods and
(BIO1 and BIO2)	conduct startups and shutdowns according to the
	manufacturer's recommended procedures.
	(40 CFR Part 63, Subpart JJJJJJ, Table 2);
	- Maintain the 30-day rolling average total secondary electric
	power of the ESP at or above the lowest hourly average
	total secondary electric power determined from the values
	of secondary voltage and secondary current to the ESP
	measured during the most recent performance stack test
	demonstrating compliance with the PM limit;
	(40 CFR Part 63, Subpart JJJJJJ, Table 3);
	- Maintain the 30-day rolling average operating load of the
	boilers such that it does not exceed 110 percent of the
	average operating load recorded during the most recent
	performance stack test.
	(40 CFR Part 63, Subpart JJJJJJ, Table 3)

(2) Boiler Tune-Up Program

- (i) A boiler tune-up program shall be implemented. The first tune-up for BIO1 and BIO2 was completed on April 10-11, 2013. The Notification of Compliance Status for the BIO1 and BIO2 tune-ups was submitted to EPA on July 15, 2014. Tune-ups for BIO1 and BIO2 shall be conducted every five years with no more than 61 months between tune-ups. [40 CFR §63.11223(c) and 40 CFR Part 63, Subpart JJJJJJ, Table 2]
- (ii) The boiler tune-up program shall be performed as specified below:
 - 1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 72 months from the previous inspection. [40 CFR §63.11223(b)(1) & (c)]
 - 2. Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR §63.11223(b)(2)]
 - 3. Inspect the system controlling the air-to-fuel ratio, <u>as applicable</u>, and ensure it is correctly calibrated and functioning properly. Delay of the

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inspection until the next scheduled shutdown is permitted; not to exceed 72 months from the previous inspection.

[40 CFR §63.11223(b)(3) & (c)]

4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR §63.11223(b)(4)]

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- 5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR §63.11223(b)(5)]
- 6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.

 [40 CFR §63.11223(b)(7)]
- (iii) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
 - 1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
 - 2. A description of any corrective actions taken as part of the tune-up of the boiler; and
 - 3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR §63.11223(b)(6)]

- b. Continuous Monitoring System (CMS) and Continuous Parameter Monitoring System (CPMS)
 - (1) Colby shall install, operate, and maintain a CPMS for BIO1 and BIO2. [40 CFR §63.11222(a)]
 - (2) Colby shall establish a site specific minimum total secondary electric power operating limit per 40 CFR Part 63, Subpart JJJJJJ, Table 6. This requirement was completed in March, 2016.
 - (3) Colby shall establish unit-specific limits for maximum operating load (fuel feed rate or steam generation data) per 40 CFR Part 63, Subpart JJJJJJ, Table 6. This requirement was completed in March, 2016.
 - (4) Colby shall continuously monitor the total secondary electric power and reduce this data to 30-day rolling averages to demonstrate compliance with the limitations on the minimum total secondary electric power per 40 CFR Part 63, Subpart JJJJJJ, Table 7.

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- (5) Colby shall continuously monitor the boiler operating loads and reduce this data to 30-day rolling averages to demonstrate compliance with the limitations on the maximum operating load per 40 CFR Part 63, Subpart JJJJJJ, Table 7.
- (6) Colby shall prepare a site-specific monitoring plan that addresses the requirements outlined in 40 CFR §63.11224(c).
- (7) The CPMS shall be continuously operated in accordance with the site-specific monitoring plan at all times that BIO1 and/or BIO2 is/are operating and firing biomass/wood except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in Colby's site-specific monitoring plan. [40 CFR §63.11221(b)]
- (8) The CPMS shall complete a minimum of one cycle of operation every 15 minutes. Colby shall have data values from a minimum of four successive cycles of operation representing each of the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed, to have a valid hour of data. [40 CFR §63.11224(d)(1)]
- (9) Colby shall calculate hourly arithmetic averages from each hour of CPMS data and determine the 30-day rolling average of all recorded readings. [40 CFR §63.11224(d)(2)]

c. Performance Tests

Colby conducted a performance test for PM emissions from BIO1 and BIO2 on February 17, 2016, in accordance with 40 CFR Part 63, Subpart JJJJJJ, Table 4. The result of this PM stack test was 0.013 lb/MMBtu. Subsequent stack tests are not required because the result this stack test was less than half of the applicable NESHAP PM limit of 0.07 lb/MMBtu. [40 CFR §63.11210(a) & (d) and 40 CFR §63.11220(b)]

d. Notifications and Reports

Colby shall submit to EPA all reports required by 40 CFR Part 63, Subpart JJJJJJ including, but not limited to, the following:

- (1) An Initial Notification submittal to EPA was due within 120 days after the source became subject to the standard. [40 CFR §63.11225(a)(2)]
- (2) Within 60 days after the date of completing each performance test, Colby shall submit the results of the performance test to EPA's WebFIRE database. [40 CFR §63.11225(e)(1)] Colby shall also submit results to the Department in accordance with Standard Condition (11)(C) of this air emission license.
- (3) A Notification of Compliance Status shall be submitted to EPA no later than 60 days following the completion of the performance stack test.

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[40 CFR §63.11225(a)(4)] EPA requires submission of Notification of Compliance Status reports for tune-ups through their electronic reporting system. [40 CFR §63.11225(a)(4)(vi)]

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(4) Compliance Reports

A compliance report shall be prepared by March 1st of each year. The report shall be maintained by the source and submitted to the Department and to the EPA upon request, unless the source experiences any deviations from the applicable requirements of this Subpart during the previous calendar year, in which case the report must be submitted to the Department and to the EPA by March 15th. The report must include the items contained in §63.11225(b)(1) through (4), including the following: [40 CFR §63.11225(b)]

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii)A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (iv) The following certifications, as applicable:
 - 1. "This facility complies with the requirements in 40 CFR §63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 - 2. "No secondary materials that are solid waste were combusted in any affected unit."
 - requirement the complies with 3. "This facility 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."
- (v) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken; and
- (vi)The total fuel use by each affected boiler subject to an emission limit for each calendar month within the reporting period.

Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJ including the following [40 CFR §63.11225(c)]:

- compliance supporting (1) Copies of notifications and reports with documentation;
- (2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- (3) Records of monthly fuel use including the type(s) of fuel and amount(s) used;
- (4) Records of the occurrence and duration of each malfunction of each applicable boiler; and

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- (5) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
- (6) Records shall be in a form suitable and readily available for expeditious review.

D. <u>SICE #1-5</u>

Colby operates Stationary Internal Combustion Engine (SICE) #1-5 as emergency generators. SICE #1-5 are generator sets with each gen set consisting of an engine and an electrical generator. SICE #1, #2, #3, #4, and #5 have engines rated at 2.5 MMBtu/hr (205 kW/306 HP), 4.9 MMBtu/hr (500 kW/695 HP), 0.56 MMBtu/hr (50 kW/70 HP), 0.75 MMBtu/hr (60 kW/84 HP), and 0.70 MMBtu/hr (50 kW/70 HP) respectively. SICE #1, #2 and #3 fire distillate fuel, and SICE #4 and #5 fire liquefied petroleum gas (LPG). SICE #1, #2, #3, #4, and #5 were manufactured in 1996, 1998, 2000, 2005, and 2004, respectively.

1. BPT Findings

The BPT emission limits for SICE #1 and #3 are based on the following:

PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 CMR 115, BPT

SO₂ - combustion of distillate fuel with a maximum sulfur content

not to exceed 15 ppm (0.0015% sulfur by weight)

NO_x - 4.41 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96 CO - 0.95 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96 VOC - 0.35 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96

Opacity - 06-096 CMR 115, BPT

The BPT emission limits for SICE #2 are based on the following:

PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 CMR 103

SO₂ - combustion of distillate fuel with a maximum sulfur content

not to exceed 15 ppm (0.0015% sulfur by weight)

NO_x
- 3.2 lb/MMBtu from AP-42, Table 3.4-1, dated 10/96
CO
- 0.85 lb/MMBtu from AP-42, Table 3.4-1, dated 10/96
VOC
- 0.09 lb/MMBtu from AP-42, Table 3.4-1, dated 10/96

Opacity - 06-096 CMR 115, BPT

The BPT emission limits for SICE #4 and #5 are based on the following:

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PM/PM₁₀ - 0.05 lb/MMBtu from 06-096 CMR 115, BPT - 5.88E-4 lb/MMBtu from AP-42, Table 3.2-2, dated 7/00 NO_x - 0.847 lb/MMBtu from AP-42, Table 3.2-2, dated 7/00 - 0.557 lb/MMBtu from AP-42, Table 3.2-2, dated 7/00 VOC - 0.118 lb/MMBtu from AP-42, Table 3.2-2, dated 7/00 Opacity - 06-096 CMR 115, BPT

The BPT emission limits for SICE #1-5 are the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
SICE #2	PM	0.12	06-096 CMR 103 (2)(B)(1)(a)
DIOD #2			

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/ <u>hr)</u>	CO (lb/hr)	VOC (lb/hr)
SICE #1 Distillate fuel	0.30	0.30	0.01	11.03	2.38	0.88
SICE #2 Distillate fuel	0.59	0.59	0.01	15.68	4.17	0.44
SICE #3 Distillate fuel	0.07	0.07	0.01	2.47	0.53	0.20
SICE #4	0.04	0.04	0.01	0.64	0.42	0.09
SICE #5	0.04	0.04	0.01	0.59	0.39	0.08

Visible emissions from SICE #1-3 shall each not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period.

Visible emissions from SICE #4 and #5 shall each not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

SICE #1-5 shall each be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. SICE #1-5 shall each be equipped with a non-resettable hour-meter to record operating time. To demonstrate compliance with the operating hours limit, Colby shall keep records of the total hours of operation and the hours of emergency operation for each unit.

SICE #1-5 are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. SICE #1-5 are not to be used for prime power when reliable offsite power is

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available; nor to operate or to be contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity.

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2. 40 CFR Part 63, Subpart ZZZZ

The federal regulation 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines is not applicable to SICE #1-5. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source. However, they are considered exempt from the requirements of Subpart ZZZZ since they are categorized as institutional emergency engines and they do not operate or are not contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii).

Operation of emergency engines such that each exceeds 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), would cause the engines to be subject to 40 CFR Part 63, Subpart ZZZZ, and require compliance with all applicable requirements.

E. <u>SICE #6-7</u>

Colby operates SICE #6 as an emergency generator. SICE #6 is a generator set consisting of an engine and an electrical generator. SICE #6 has an engine rated at 1.46 MMBtu/hr (105 kW/195 HP) which fires LPG. SICE #6 was manufactured in 2012.

Colby operates SICE #7 as a fire pump. SICE #7 has an engine rated at 0.62 MMBtu/hr (64 kW/86 HP) which fires distillate fuel. SICE #7 was manufactured in 2012.

1. BPT Findings

The BPT emission limits for SICE #6 are based on the following:

PM/PM₁₀ - 7.71E-5 lb/MMBtu from AP-42, Table 3.2-2, dated 7/00 SO₂ - 5.88E-4 lb/MMBtu from AP-42, Table 3.2-2, dated 7/00 NO_x - 2.0 g/hp-hr from Table 1 of 40 CFR Part 60, Subpart JJJJ CO - 4.0 g/hp-hr from Table 1 of 40 CFR Part 60, Subpart JJJJ VOC - 1.0 g/hp-hr from Table 1 of 40 CFR Part 60, Subpart JJJJ Opacity - 06-096 CMR 115, BPT

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The BPT emission limits for SICE #7 are based on the following:

PM/PM ₁₀ SO ₂	- 0.30 g/hp-hr from Table 4 of 40 CFR Part 60, Subpart IIII - combustion of distillate fuel with a maximum sulfur content no to exceed 15 ppm (0.0015% sulfur by weight)	
NO_x	- 3.5 g/hp-hr for NMHC* + NO _x from Table 4 of 40 CFR Part 60),
	Subpart IIII	
CO	- 3.7 g/hp-hr from Table 4 of 40 CFR Part 60, Subpart IIII - 3.5 g/hp-hr for NMHC* + NO _x from Table 4 of 40 CFR Part 60),
VOC	Subpart IIII	
Opacity	- 06-096 CMR 101 (2)(B)(1)(d)	
*NMHC = n	on-methane hydrocarbons	

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The BPT emission limits for SICE #6-7 are the following:

PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
0.01	0.01	0.01	0.86	1.72	0.43
0.06	0.06	0.01	0.66*	0.70	0.66**
	(lb/hr) 0.01	(lb/hr) (lb/hr) 0.01 0.01	(lb/hr) (lb/hr) (lb/hr) 0.01 0.01 0.01	(lb/hr) (lb/hr) (lb/hr) (lb/hr) (lb/hr) 0.01 0.01 0.01 0.86	(lb/hr) (lb/hr) (lb/hr) (lb/hr) (lb/hr) (lb/hr) (lb/hr) 0.01 0.01 0.01 0.86 1.72

^{*}This is the calculated worst case emissions for NO_x, assuming that all of the pollutants covered in the NMHC + NO_x emission factor is NO_x.

Visible emissions from SICE #6 shall not exceed 10% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period.

Visible emissions from SICE #7 shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period.

2. 40 CFR Part 60, Subpart IIII

The federal regulation 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) is applicable to SICE #7 since the unit was ordered after July 11, 2005 and manufactured after April 1, 2006. By meeting the requirements of Subpart IIII, SICE #7 also meets the requirements found in the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ.

^{**}This is the calculated worst case emissions for VOC, assuming that all of the pollutants covered in the NMHC + NO_x emission factor is VOC.

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a. Emergency Engine Designation and Operating Criteria

Under Subpart IIII, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under Subpart IIII, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of an emergency situation include using an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, using an engine to pump water in the case of fire or flood, etc.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for Maintenance Checks, Readiness Testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE more than 100 hours per calendar year.
- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an

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electric grid or otherwise supply power as part of a financial arrangement with another entity, unless:

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1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

3. The dispatch follows reliability, emergency operation or similar protocols that follow specific North American Electric Reliability Corporation (NERC), regional, state, public utility commission, or local standards or guidelines.

4. The power is provided only to the facility itself or to support the local transmission and distribution system.

5. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

b. 40 CFR Part 60, Subpart IIII Requirements:

- (1) Manufacturer Certification Requirement SICE #7 shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 CFR §60.4202. [40 CFR §60.4205(b)]
- (2) Ultra-Low Sulfur Fuel Requirement
 The fuel fired in SICE #7 shall not exceed 15 ppm sulfur (0.0015% sulfur),
 except that any existing fuel purchased (or otherwise obtained) prior to
 October 1, 2010, may be used until depleted. [40 CFR §60.4207(b)]
- (3) Non-Resettable Hour Meter Requirement
 A non-resettable hour meter shall be installed and operated on SICE #7.
 [40 CFR §60.4209(a)]
- (4) Operation and Maintenance Requirements SICE #7 shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by Colby that are approved by the engine manufacturer. Colby may only change those emission-related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]

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- (5) Annual Time Limit for Maintenance and Testing
 As a fire pump, SICE #7 shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations. [40 CFR §60.4211(f)]
- (6) Initial Notification Requirement

 No initial notification is required for emergency engines. [40 CFR §60.4214(b)]
- (7) Recordkeeping
 Colby shall keep records that include maintenance conducted on SICE #7 and
 the hours of operation of the engine recorded through the non-resettable hour
 meter. Documentation shall include the hours spent for emergency operation,
 including what classified the operation as emergency and how many hours
 spent for non-emergency. [40 CFR §60.4214(b)]

3. 40 CFR Part 60, Subpart JJJJ

The federal regulation 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Spark Ignition Internal Combustion Engines (SI ICE) is applicable to SICE #6 listed above since the unit was ordered after June 12, 2006 and manufactured after January 1, 2009. By meeting the requirements of Subpart JJJJ, SICE #6 also meets the requirements found in the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ.

a. Emergency Engine Designation and Operating Criteria

Under Subpart JJJJ, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under Subpart JJJJ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of an emergency situation include using an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, using an engine to pump water in the case of fire or flood, etc.

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(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for Maintenance Checks, Readiness Testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE more than 100 hours per calendar year.
- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity, unless:

- 1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- 2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- 3. The dispatch follows reliability, emergency operation or similar protocols that follow specific North American Electric Reliability Corporation (NERC), regional, state, public utility commission, or local standards or guidelines.
- 4. The power is provided only to the facility itself or to support the local transmission and distribution system.
- 5. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission, or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local

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transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

b. 40 CFR Part 60, Subpart JJJJ Requirements:

- (1) Manufacturer Certification Requirement SICE #6 shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 CFR Part 60, Subpart JJJJ, Table 1.
- (2) Non-Resettable Hour Meter Requirement
 A non-resettable hour meter shall be installed and operated on SICE #6.
 [40 CFR §60.4237]
- (3) Operation and Maintenance Requirement SICE #6 shall be operated and maintained according to the manufacturer's written instructions or procedures developed by Colby that are approved by the engine manufacturer. Colby may only change those settings that are permitted by the manufacturer. [40 CFR §60.4243]
- (4) Annual Time Limit for Maintenance and Testing
 As an emergency engine, SICE #6 shall be limited to 100 hours/year for maintenance and testing. SICE #6 may operate up to 50 hours per year in non-emergency situations, but those 50 hours are included in the 100 hours allowed for maintenance and testing. The 50 hours for non-emergency use cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR §60.4243(d)]
- (5) Recordkeeping
 - Colby shall keep records that include maintenance conducted on SICE #6 and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and the hours spent for non-emergency. If the engine is operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in §60.4243(d)(3)(i), Colby shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR §60.4245(b)]
- (6) Annual Reporting Requirement for Demand Response Availability Over 15 Hours Per Year (for engines greater than 100 brake hp)

 If SICE #6 at Colby operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a

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period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §60.4243(d)(3)(i), the facility shall submit an annual report containing the information in §60.4245(e)(1)(i) through (vii). The annual report for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (OES04-2)
Boston, MA 02109-3912
Attn: Air Compliance Clerk

[40 CFR §60.4245(e)]

F. Gasoline Storage Tank

The Gasoline Storage Tank has a 3,000 gallon capacity and is subject to the requirements in 06-096 CMR 118. BPT for the Gasoline Storage Tank shall be the following:

- 1. The fill pipe shall extend within 6 inches of the bottom of the gasoline storage tank.

 [06-096 CMR 118 (4)(A)]
- 2. Colby shall maintain records of the monthly and annual throughput of gasoline. Copies of these records shall be maintained for a minimum of three (3) years. [06-096 CMR 118 (10)(B)]

G. Parts Washer

Colby operates one parts washer that has a design capacity of 15 gallons. The parts washer is subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended), and records shall be kept documenting compliance.

H. Fugitive Emissions

Visible emissions from any fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

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I. General Process Emissions

Visible emissions from any general process source shall not exceed an opacity of 20% on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period.

J. Annual Emissions

1. Total Annual Emissions

Colby shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on a combined heat input of 246,840 MMBtu/yr for Boilers 10A, 10B, and 10C, 8,760 hrs/yr operating time for Boilers BIO1 and BIO2, and 100 hrs/yr non-emergency operating time for SICE #1-7:

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boilers 10A, 10B, and 10C	6.2	6.2	0.1	12.3	10.2	2.5
Boilers BIO1 and BIO2	5.3	5.3	4.4	54.8	26.3	3.0
SICE #1-7	0.1	0.1	0.1	1.5	0.5	0.1
Total TPY	11.6	11.6	4.6	68.6	37.0	5.6

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's heat input limits and non-emergency operating hour restrictions;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and 40 CFR Part 98, Mandatory Greenhouse Gas Reporting; and
- global warming potentials contained in 40 CFR Part 98.

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No additional licensing actions to address GHG emissions are required at this time.

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AMBIENT AIR QUALITY ANALYSIS III.

Colby previously submitted an ambient air quality impact analysis for PM10, SO2, NO2, and CO for air emission license A-107-71-Q-R/A (dated November 5, 2010) and for NO₂ for air emission license A-107-71-S-M (dated October 25, 2013) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate Ambient Air Quality Standards (AAQS). An additional air quality impact analysis is not required for this renewal.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-107-71-W-R/M subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions **(1)** units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).
- The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. (2) [06-096 CMR 115]
- Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is (3) discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may

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condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.

 [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that

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equipment may be operating out of compliance with emission standards or license conditions; or

2. pursuant to any other requirement of this license to perform stack testing.

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- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. submit a written report to the Department within thirty (30) days from date of test completion. [06-096 CMR 115]
- If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable (12)standards, then:
 - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

- Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of (13)establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself (14)that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the

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next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Boilers 10A, 10B, and 10C**

A. Fuel

- 1. Boilers 10A, 10B, and 10C are licensed to fire natural gas and LPG. [06-096 CMR 115, BPT]
- 2. Total fuel use for Boilers 10A, 10B, and 10C combined shall not exceed an annual heat input of 246,840 MMBtu, based on a 12-month rolling total basis. [06-096 CMR 115, BPT]
- 3. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis and shall be converted to MMBtu monthly and on a 12-month rolling total basis using heating values of 0.00102 MMBtu/scf for natural gas and 0.0915 MMBtu/gal for LPG. [06-096 CMR 115, BPT]
- B. Colby shall maintain records for Boiler 10C documenting the de-rating of the boiler via piping and burner sizing which restricts the fuel delivery and corresponding maximum heat input capacity of the boiler to a maximum of 19 MMBtu/hour. [06-096 CMR 115, BPT]
- C. Emissions shall not exceed the following:

<u>Unit</u>	Pollutant	lb/MMBtu	Origin and Authority
Boilers 10A, 10B, and 10C [each]	PM	0.05	06-096 CMR 115, BPT

D. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

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Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boilers 10A and 10B [each]		1.86	0.02	3.71	3.06	0.74
	0.95	0.95	0.01	1.90	1.56	0.38
Boiler 10C	0.55		<u> </u>			

- E. Visible emissions from the combined stack for Boilers 10A, 10B, and 10C, Stack 9, shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a continuous three-hour period. [06-096 CMR 101]
- F. Colby shall comply with all requirements of 40 CFR Part 60, Subpart Dc applicable to Boilers 10A, 10B, and 10C including, but not limited to, the following:
 - 1. Colby shall maintain records of the amount of each fuel combusted in Boilers 10A, 10B, and 10C during each calendar month. [40 CFR Part 60, §60.48c (g)(2)]
 - 2. Each record shall be maintained by Colby for a period of two years following the date of such record. [40 CFR Part 60, §60.48c (i)]

(17) Boilers BIO1 and BIO2

- A. Boilers BIO1 and BIO2 shall be limited to firing biomass/wood fuel only. [06-096 CMR 115, BPT]
- B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Boilers BIO1 and BIO2 [each]	PM	0.03	A-107-71-Q-R/A dated 11/5/2010, BACT
and BIO2 [cach]			

C. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boilers BIO1 and BIO2 [each]	0.60	0.60	0.50	6.25	3.00	0.34

D. Visible emissions from the combined stack serving both Boilers BIO1 and BIO2, Stack 10, shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [A-107-71-Q-R/A dated 11/5/2010, BACT]

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- E. Colby shall comply with all requirements of 40 CFR Part 60, Subpart Dc applicable to Boilers BIO1 and BIO2 including, but not limited to, the following:
 - 1. Colby shall maintain records of the amount of each fuel combusted in each boiler during each calendar month. [40 CFR Part 60, §60.48c (g)(2)]
 - 2. Each record shall be maintained by Colby for a period of two years following the date of such record. [40 CFR Part 60, §60.48c (i)]
- F. Boiler MACT (40 CFR Part 63, Subpart JJJJJJ) Requirements for BIO1 and BIO2 [incorporated under 06-096 CMR 115, BACT]
 - 1. Emission Limits and Work Practice Standards
 - a. BIO1 and BIO2 are subject to the following requirements:

	Operating Limitations
New biomass-fired	- Limit emissions of PM (filterable) to less than or equal to
boilers with heat input	0.070 lb/MMBtu except for periods of startup and
capacity between 10	shutdown (40 CFR Part 63, Subpart JJJJJJ, Table 1);
and 30 MMBtu/hr	- Minimize the boilers' startup and shutdown periods and
(BIO1 and BIO2)	conduct startups and shutdowns according to the
	manufacturer's recommended procedures.
	(40 CFR Part 63, Subpart JJJJJ, Table 2);
	- Maintain the 30-day rolling average total secondary electric
	power of the ESP at or above the lowest hourly average
	total secondary electric power determined from the values
	of secondary voltage and secondary current to the ESP
	measured during the most recent performance stack test
	demonstrating compliance with the PM limit;
	(40 CFR Part 63, Subpart JJJJJJ, Table 3);
	- Maintain the 30-day rolling average operating load of the
	boilers such that it does not exceed 110 percent of the
	average operating load recorded during the most recent
	performance stack test.
	(40 CFR Part 63, Subpart JJJJJJ, Table 3)

b. Boiler Tune-Up Program

- (1) A boiler tune-up program shall be implemented. [40 CFR §63.11223]
- (2) Tune-ups for BIO1 and BIO2 shall be conducted every five years with no more than 61 months between tune-ups. [40 CFR §63.11223(c) and 40 CFR Part 63, Subpart JJJJJJ, Table 2]

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(3) The boiler tune-up program shall be performed as specified below:

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- (i) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 72 months from the previous inspection. [40 CFR §63.11223(b)(1) & (c)]
- (ii) Inspect the flame pattern, <u>as applicable</u>, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR §63.11223(b)(2)]
- (iii)Inspect the system controlling the air-to-fuel ratio, <u>as applicable</u>, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 72 months from the previous inspection.

 [40 CFR §63.11223(b)(3) & (c)]
- (iv)Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR §63.11223(b)(4)]
- (v) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR §63.11223(b)(5)]
- (vi) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.
 [40 CFR §63.11223(b)(7)]
- (4) <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
 - (i) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
 - (ii) A description of any corrective actions taken as part of the tune-up of the boiler; and
 - (iii) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR §63.11223(b)(6)]

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- 2. Continuous Monitoring System (CMS) and Continuous Parameter Monitoring System (CPMS)
 - a. Colby shall install, operate, and maintain a CPMS for BIO1 and BIO2. [40 CFR §63.11222(a)]
 - b. Colby shall establish a site specific minimum total secondary electric power operating limit per 40 CFR Part 63, Subpart JJJJJJ, Table 6.
 - c. Colby shall establish unit-specific limits for maximum operating load (fuel feed rate or steam generation data) per 40 CFR Part 63, Subpart JJJJJJ, Table 6.
 - d. Colby shall continuously monitor the total secondary electric power and reduce this data to 30-day rolling averages to demonstrate compliance with the limitations on the minimum total secondary electric power per 40 CFR Part 63, Subpart JJJJJJ, Table 7.
 - e. Colby shall continuously monitor the boiler operating loads and reduce this data to 30-day rolling averages to demonstrate compliance with the limitations on the maximum operating load per 40 CFR Part 63, Subpart JJJJJJ, Table 7.
 - f. Colby shall prepare a site-specific monitoring plan that addresses the requirements outlined in 40 CFR §63.11224(c).
 - g. The CPMS shall be continuously operated in accordance with the site-specific monitoring plan at all times that BIO1 and/or BIO2 is/are operating and firing biomass/wood except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in Colby's site-specific monitoring plan. [40 CFR §63.11221(b)]
 - h. The CPMS shall complete a minimum of one cycle of operation every 15 minutes. Colby shall have data values from a minimum of four successive cycles of operation representing each of the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed, to have a valid hour of data. [40 CFR §63.11224(d)(1)]
 - i. Colby shall calculate hourly arithmetic averages from each hour of CPMS data and determine the 30-day rolling average of all recorded readings. [40 CFR §63.11224(d)(2)]

3. Notifications and Reports

Colby shall submit to EPA all reports required by 40 CFR Part 63, Subpart JJJJJJ including, but not limited to, the following:

a. Within 60 days after the date of completing each performance test, Colby shall submit the results of the performance test to EPA's WebFIRE database.

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[40 CFR §63.11225(e)(1)] Colby shall also submit results to the Department in accordance with Standard Condition (11)(C) of this air emission license.

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- b. A Notification of Compliance Status shall be submitted to EPA no later than 60 days following the completion of the performance stack test. [40 CFR §63.11225(a)(4)] EPA requires submission of Notification of Compliance Status reports for tune-ups through their electronic reporting system. [40 CFR §63.11225(a)(4)(vi)]
- c. Compliance Reports

A compliance report shall be prepared by March 1st of each year. The report shall be maintained by the source and submitted to the Department and to the EPA upon request, unless the source experiences any deviations from the applicable requirements of this Subpart during the previous calendar year, in which case the report must be submitted to the Department and to the EPA by March 15th. The report must include the items contained in §63.11225(b)(1) through (4), including the following: [40 CFR §63.11225(b)]

- (1) Company name and address;
- (2) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (3) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- (4) The following certifications, as applicable:
 - (i) "This facility complies with the requirements in 40 CFR §63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
 - (ii) "No secondary materials that are solid waste were combusted in any affected unit."
 - requirement with the complies facility (iii) "This 40 CFR §§63.11214(d) to conduct a tune-up of each applicable boiler according to 40 CFR §63.11223(b)."
- (5) If the sources experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken; and
- (6) The total fuel use by each affected boiler subject to an emission limit for each calendar month within the reporting period.

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4. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJJ including the following [40 CFR Part 63.11225(c)]:

- a. Copies of notifications and reports with supporting compliance documentation;
- b. Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
- c. Records of monthly fuel use including the type(s) of fuel and amount(s) used;
- d. Records of the occurrence and duration of each malfunction of each applicable boiler; and
- e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.
- f. Records shall be in a form suitable and readily available for expeditious review.

(18) **SICE #1-5**

- A. SICE #1-5 shall each be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 CMR 115, BPT]
- B. Colby shall keep records that include maintenance conducted on each engine and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and the hours spent for non-emergency. [06-096 CMR 115, BPT]
- C. If the engines are operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity, Colby shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [06-096 CMR 115, BPT]
- D. The fuel sulfur content for SICE #1-5 shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 115, BPT]
- E. Emissions shall not exceed the following:

<u>Unit</u>	Pollutant	lb/MMBtu	Origin and Authority
SICE #2	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

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F. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

<u>Unit</u>	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
SICE #1 Distillate fuel	0.30	0.30	0.01	11.03	2.38	0.88
SICE #2 Distillate fuel	0.59	0.59	0.01	15.68	4.17	0.44
SICE #3 Distillate fuel	0.07	0.07	0.01	2.47	0.53	0.20
SICE #4 LPG	0.04	0.04	0.01	0.64	0.42	0.09
SICE #5 LPG	0.04	0.04	0.01	0.59	0.39	0.08

G. Visible Emissions

- 1. Visible emissions from SICE #1-3 shall each not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period. [06-096 CMR 115, BPT]
- 2. Visible emissions from SICE #4-5 shall each not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a 3-hour period. [06-096 CMR 115, BPT]
- H. SICE #1-5 are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. SICE #1-5 are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity.

(19) **SICE #6-7**

A. SICE #6 and #7 shall each be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 CMR 115, BPT]

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B. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

<u>Unit</u>	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
SICE #6 LPG	0.01	0.01	0.01	0.86	1.72	0.43
SICE #7 Distillate fuel	0.06	0.06	0.01	0.66*	0.70	0.66**

^{*}This is the calculated worst case emissions for NO_x , assuming that all of the pollutants covered in the $NMHC + NO_x$ emission factor is NO_x .

C. Visible Emissions

- 1. Visible emissions from SICE #7 shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period. [06-096 CMR 101]
- 2. Visible emissions from SICE #6 shall not exceed 10% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period. [06-096 CMR 115, BPT]
- D. SICE #7 shall meet the applicable requirements of 40 CFR Part 60, Subpart IIII, including the following:
 - 1. Manufacturer Certification

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in §60.4202. [40 CFR §60.4205(b)]

2. Ultra-Low Sulfur Fuel

The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010 may be used until depleted. Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 CFR §60.4207(b) and 06-096 CMR 115, BPT]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on the engine. [40 CFR §60.4209(a)]

^{**}This is the calculated worst case emissions for VOC, assuming that all of the pollutants covered in the NMHC + NO_x emission factor is VOC.

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- 4. Annual Time Limit for Maintenance and Testing
 - a. As an emergency engine, SICE #7 shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations. These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 CFR §60.4211(f) and 06-096 CMR 115, BPT]
 - b. Colby shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. [06-096 CMR 115, BPT]
- 5. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by Colby that are approved by the engine manufacturer. Colby may only change those emission related settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]

- E. SICE #6 shall meet the applicable requirements of 40 CFR Part 60, Subpart JJJJ, including the following:
 - 1. Manufacturer Certification

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 CFR Part 60, Subpart JJJJ, Table 1.

2. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on the engine. [40 CFR §60.4237 and 06-096 CMR 115, BPT]

- 3. Annual Time Limit for Maintenance and Testing
 - a. As an emergency engine, SICE #6 shall be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §60.4243(d)(3)(i) are met). The limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 CFR §60.4243(d) and 06-096 CMR 115]

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b. Colby shall keep records that include maintenance conducted on the engine(s) and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the engine is operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in §60.4243(d)(3)(i), Colby shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

4. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's written instructions or procedures developed by Colby that are approved by the engine manufacturer. Colby may only change those settings that are permitted by the manufacturer. [40 CFR §60.4243]

5. Annual Reporting For Demand Response Availability Over 15 Hours Per Year (for engines greater than 100 brake hp)

If SICE #6 at Colby operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §60.4243(d)(3)(i), the facility shall submit an annual report containing the information in §60.4245(e)(1)(i) through (vii). The annual report for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (OES04-2)
Boston, MA 02109-3912
Attn: Air Compliance Clerk

[40 CFR §60.4245(e)]

(20) Gasoline Storage Tank

- A. The fill pipe shall extend within six (6) inches of the bottom of the Gasoline Storage Tank. [06-096 CMR 118]
- B. Colby shall maintain records of the monthly and annual throughput of gasoline. [06-096 CMR 118]

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(21) Parts Washer

Parts washers at Colby are subject to Solvent Cleaners, 06-096 CMR 130 (as amended).

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- A. Colby shall keep records of the amount of solvent added to each parts washer. [06-096 CMR 115, BPT]
- B. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:
 - 1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
 - 2. Wipe cleaning; and,
 - 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to cold cleaning machines that are applicable sources under Chapter 130.
 - 1. Colby shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
 - a. Waste solvent shall be collected and stored in closed containers.
 - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
 - f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - h. Work area fans shall not blow across the opening of the parts washer unit.
 - i. The solvent level shall not exceed the fill line.
 - 2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130]

(22) Fugitive Emissions

Visible emissions from any fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

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(23) General Process Sources

Visible emissions from any general process source shall not exceed an opacity of 20% on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period. [06-096 CMR 101]

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(24) Annual Emission Statement

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 CMR 137.

(25) Colby shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 15

15 DAY OF April

, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Wen Kovert one for PAUL MERCER, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a complete renewal application, as determined by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S.A. §10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the renewal of the license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: <u>September 10, 2015</u>
Date of application acceptance: <u>September 10, 2015</u>

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.

Filed APR 1 9 2016

State of Maine Board of Environmental Protection